CIO

FROM LOOKERS TO BOOKERS
A hotel chain's mobile apps boost loyalty **8**

THE EMPLOYEE MUTINY
Workers refuse to use clunky software **12**

DOUBLE THE SOFTWARE VALUE?
Security, savings in dual releases **14**

OUTSOURCERS CATCH A BREAK
India grants exemption to privacy rules **18**

Building Bridges

Get over your service mentality and step up to a true business partnership **22**

BY DIANE FRANK

Cognizant
THE FUTURE IS NOW
See page 7

BUSINESS TECHNOLOGY LEADERSHIP
www.cio.com
November 15, 2011 $9.00

Nothing speeds the pace of business like collaboration.

This is why Avaya is dedicated to delivering products that allow the right people to share the right information in real time. Because faster collaboration leads to smarter decisions. And smarter decisions are a sure path to a better business.

Learn how real-time collaboration can improve your business at avaya.com/thepowerofwe.

AVAYA

The Power of We™

©2011 Avaya Inc. All rights reserved.

VOLUME 25, NO. 4 November 15, 2011

Start

From the Editor in Chief 2
Chatter 2
From the Publisher Emeritus 4
What We're Reading 6

2

Grow

INNOVATION & BUSINESS VALUE

One hotel chain hopes to boost business by allowing customers to book on the fly 8
Visa delays make importing staff harder 10
Why workers won't use your enterprise apps 12

14

Run

LEADERSHIP & OPERATIONAL EXCELLENCE

Open source cuts costs and boosts security 14
Finally, more security in iOS 5 16
India exempts outsourcers from privacy law 18
Cyberattack disclosure rules expand 18
Testing SAP's new analytics software 20

32

Finish

Index 30
The digital groove project 32

COVER ILLUSTRATION BY ANDY POTTS

Building Bridges 22

COVER STORY Get over your service mentality and step up to a true business partnership

BY DIANE FRANK

Establish yourself as a general manager, not a technology guru, says **Leslie Jones,** SVP and CIO at Motorola Solutions.

start

FROM THE
EDITOR IN CHIEF

Trust Builders

I know a lot of CIOs who detest the phrase "IT and the business," implying as it does that IT is a thing apart, a foreign particle in the company body. As someone who believes in the power of language, I'm with them. I cringe to think how often we fall victim to that polarizing phrase in the pages of *CIO*.

Yet however much we wish business people would see their IT colleagues as equal partners and peers, we know they generally don't. Far too many companies feel about IT the way Red Robin Gourmet Burgers once did. When CIO Chris Laping joined the restaurant chain four years ago, "No one would talk to IT unless their mouse wasn't working."

Like the other CIOs profiled in our cover story ("Building Bridges," Page 22), Laping turned around IT's reputation and gradually improved the working relationships and trust levels with the rest of the business. IT projects got measured with business metrics instead of technical ones. Creating better customer experiences became more important to IT staffers than creating new systems. The distinction between IT and the business started to blur.

"My current and ultimate goal is that there is absolutely no distinction between IT and the business," says CIO Leslie Jones of Motorola Solutions. "We're in the business; our field just happens to be IT."

As you read through the story, you'll notice that no rocket science was necessary, though everyone had complex problems to solve before the IT-business relationship turned a corner. Even if the IT group sees itself as a strategic player, "the proof is ultimately whether the rest of the company feels the same way," notes writer Diane Frank, editorial manager for our CIO Executive Council.

The experiences of the CIOs profiled—including those of Toyota Motor Sales, Hilton Worldwide, Red Robin, First Data and Motorola Solutions—also demonstrate some timeless truths about leadership: Take the time to build trust and credibility. Communicate at any and every opportunity. Manage and nurture relationships across the company.

"In my world, the way you build trust is by making promises and keeping promises—repeatedly—and then there's the opportunity to build a deeper relationship," says CIO Robert Webb of Hilton.

That advice certainly applies to any company. How is it working in yours?

Maryfran Johnson

Maryfran Johnson, Editor in Chief, *CIO* Magazine & Events
mfjohnson@cio.com

CHATTER

Leadership Crisis for CIO?

The story of David Reynolds, a systems manager and **aspiring CIO** at the Rhode Island Blood Center, opened up a larger discussion about the **CIO role.** In order to move up, Reynolds sees the need to speak the **language of business,** anticipate users' needs and **build relationships** among colleagues, executives and vendors. Senior Features Writer Meridith Levinson adds that because of the recession, globalization and trends such as **cloud,** CIOs need to be more **innovative** and **business-focused** than ever and spend less time on IT infrastructure. www.cio.com/article/692324

Enterprise Nutrition Facts

Google announced **Ice Cream Sandwich,** otherwise known as Android mobile OS version 4.0. Senior Editor Al Sacco says that although the OS was designed for **consumer use,** it actually has some **valuable business features,** such as **Android Beam,** which uses **near-field communications** to share information between two devices. And Ice Cream Sandwich supports full on-device encryption, which means data can be **scrambled** to protect it if the device is lost. www.cio.com/article/692198

Next Three Years in Tech

Forrester reported "The **Top 10 Technology Trends** EA Should Watch: 2012 to 2014," in which it polled 208 IT executives and found that **BI tools, mobile apps and cloud application platforms** will create more **business value.** Assistant Managing Editor Shane O'Neill takes us through the findings, noting that BI jumped from third to first place in the ranking of technology that's expected to **change** the most. www.cio.com/article/692280

Compiled by Editorial Assistant Lauren Brousell. Have a comment about a story in this issue? Go to *www.cio.com/issue/20111115* or write to *letters@cio.com*.

PHOTO BY TIM LLEWELLYN

Copyright © 2011 VMware, Inc.

Today, 97% of the Fortune Global 500 rely on VMware,® the global leader in virtualization and cloud infrastructure. With VMware, you can leverage your existing IT investments as you transition to a secure, managed and controlled cloud solution. Because it's not about getting to *the* cloud. It's about getting to *your* cloud.

vmware®

The power behind your cloud.

Visit vmware.com/whiteboard

FROM THE
PUBLISHER EMERITUS

Timely Advice

"How you spend your time is more important than how you spend your money. Money mistakes can be corrected, but time is gone forever."

That inspirational quote jumped out at me after spending the past six months traveling across the country speaking with CIOs about how they spend their time. Two questions from our annual State of the CIO research get at the same topic. As part of that survey, we ask hundreds of CIOs where they spend their time now and where they would like to spend their time in the coming two years.

From the responses to those two questions, I created what I call a Future Priorities Index, which maps where CIOs claim they want to spend more time against where they're occupied now.

Let's take a look.

In the "how they currently spend their time" category, the top three vote-getters are: 1) aligning IT and business goals, 2) implementing new architectures and 3) managing cost control. For "where they want to spend more time in the future," the list looks like this: 1) developing new go-to-market strategies and technologies, 2) studying market trends for commercial opportunities and 3) identifying opportunities for competitive differentiation.

So how do you map your time management to these new priorities? As one CIO tells me, you "staple yourself to an order" at your company. Another says, "Take the VP of sales and chief marketing officer to lunch once a month."

And how do you do that and make sure the trains are running on time? Delegate, delegate and delegate more! Your job as CIO is to get into the field more often so you can bring the voice of the customer to the executive committee's decision table. And to do that job well, James Cash, former associate dean of Harvard Business School, recommends you spend a minimum of 25 percent of your time hobnobbing with internal and external customers. Nothing less will do.

Take this advice on time management to heart during your final budget cycle. Look at areas where you are spending a lot of money but not much time and consider whether you need to reverse that ratio.

If you would like a full copy of the CIO Future Priorities Index, send me an email.

Gary J. Beach

Gary Beach, Publisher Emeritus
gbeach@cio.com

PHOTO BY WEBB CHAPPELL

CIO
BUSINESS TECHNOLOGY LEADERSHIP

PRESIDENT AND CEO Michael Friedenberg
GROUP PUBLISHER Bob Melk
PUBLISHER Adam Dennison
PUBLISHER EMERITUS Gary J. Beach
CHIEF CONTENT OFFICER John Gallant

EDITORIAL

EDITOR IN CHIEF
Maryfran Johnson
EXECUTIVE EDITOR
Mitch Betts
MANAGING EDITOR
Christine Celli
SENIOR EDITOR
Kim S. Nash
COPY EDITOR
Colleen Barry
CONTRIBUTORS
Adam Hartung, Chris Kanaracus, Maria Korolov, James Niccolai, Stephanie Overby, John Ribeiro
EDITORIAL ASSISTANT
Lauren Brousell

CONTRIBUTING EDITORS

CIO EXECUTIVE COUNCIL
VICE PRESIDENT, EDITORIAL AND PROGRAMS
Rick Pastore
EDITORIAL MANAGER
Diane Frank

DESIGN

EXECUTIVE DIRECTOR, ART AND DESIGN
Mary Lester
ART DIRECTOR
Terri Haas

ONLINE EDITORIAL

EDITORIAL DIRECTOR
Brian Carlson
ASSISTANT MANAGING EDITOR
Shane O'Neill
SENIOR FEATURES WRITER
Meridith Levinson
SENIOR EDITOR
Al Sacco
SENIOR ONLINE WRITER
Tom Kaneshige
STAFF WRITER
Kristin Burnham
ASSOCIATE ONLINE EDITOR
Sheryl Hodge

RESEARCH

RESEARCH DIRECTOR
Carolyn Johnson

CXO MEDIA INC.

©CXO Media Inc.

INTERNATIONAL DATA GROUP
CHAIRMAN OF THE BOARD
Patrick J. McGovern
IDG COMMUNICATIONS, INC.
CEO
Bob Carrigan

BPA WORLDWIDE

CONTACT US

WHO COVERS WHAT *www.cio.com/staff*
EMAIL *letters@cio.com*
PHONE 508 872-0080

verizon

HTC Trophy™

BlackBerry® Bold™ 9930

Droid 3 by Motorola

Droid Pro by Motorola

FiveSpot™ Global Ready™ Mobile Hotspot

"BEST WIRELESS SERVICE IN THE WORLD."

Best Wireless Service in the World Verizon Wireless 2010

As voted by the readers of Global Traveler magazine.

Enjoy the nation's most reliable wireless network at home plus global coverage in more than 200 countries worldwide to talk, message, and surf the Web.

verizonwireless.com/global

© 2011 Verizon Wireless

books, **blogs** and the latest **research** about **IT**, **management** and **leadership**

what we're Reading

Users Not Customers

Who Really Determines the Success of Your Business

By Aaron Shapiro

While most businesses are trying to get closer to their customers, Shapiro says you should first cozy up to users. Same thing, no? Shapiro's strategic shift makes the distinction that although many users are customers, users are really the key influencers. They create perceptions and share critiques about brands, thereby affecting how customers act. With stories from Mint.com and Best Buy, Shapiro outlines how to realign your business and refine the user experience. *Portfolio Penguin, $26.95*

Nanovation

How a Little Car Can Teach the World to Think Big and Act Bold

By Kevin and Jackie Freiberg and Dain Dunston

BOOK The story of how Tata Motors created a car that changed India carries broader implications for innovation strategies, say the authors. *Nanovation* is a tale of souped-up innovation and how the people behind the Nano achieved what competitors said was impossible: unprecedented products, fully motivated employees and worldwide recognition. Tata's Nano managed to make a more energy-efficient family car for the price of a motor scooter by embracing failure and never assuming anything. *Thomas Nelson, $24.99*

The Future of Value

How Sustainability Creates Value Through Competitive Differentiation

By Eric Lowitt

BOOK One may not expect that organizations can gain a competitive edge through sustainability, but this author shows how companies have done just that. He says that creating truly sustainable processes can accelerate overall business performance. Lowitt has developed a model that he says helps companies develop and assess successful sustainability plans. It incorporates five management practices, including top- and bottom-line improvement approaches, governance structures, and value chain activity adjustments. *Wiley, $32.95*

@RalphLoura

By Ralph Loura

TWITTER The CIO of Clorox posts links to relevant technology news, blogs and research, along with his own evaluations of business and customer service. He tweeted an article in favor of continuing to support BlackBerrys and said, "I could disagree more." Loura also posted a complaint about the failure of a mobile boarding pass: "Gate doesn't have me as checked in. Gave away my seat!" **twitter.com/ralphloura**

Passion and Purpose

Stories from the Best and Brightest Young Business Leaders

By John Coleman, Daniel Gulati, and W. Oliver Segovia

BOOK These crowdsourced stories from young MBAs (the book is also written by three MBA graduates from Harvard Business School) may provide encouragement to business leaders struggling with millennials in the workplace. The books says these young up-and-comers can bring valuable experience to top-notch companies, highlighting young people who have launched startups, fought for gender equality in the workplace and taught in the Middle East. To balance the generation gap, the book also includes perspectives from the CEOs of McKinsey and Pandora. *Harvard Business Review Press, $25.95*

Compiled by Editorial Assistant Lauren Brousell. To tell us what you're reading, write to *letters@cio.com*.

20TH CENTURY BUSINESS HABITS BELONG THERE.

The old ways won't cut it anymore. That's why we're helping companies around the world rethink the way they compete, reinvent the way they work and rewire the way they operate. In short: embrace a more collaborative, flexible and global approach. Because today it's the specific way a business takes care of business that determines how far it will go tomorrow.

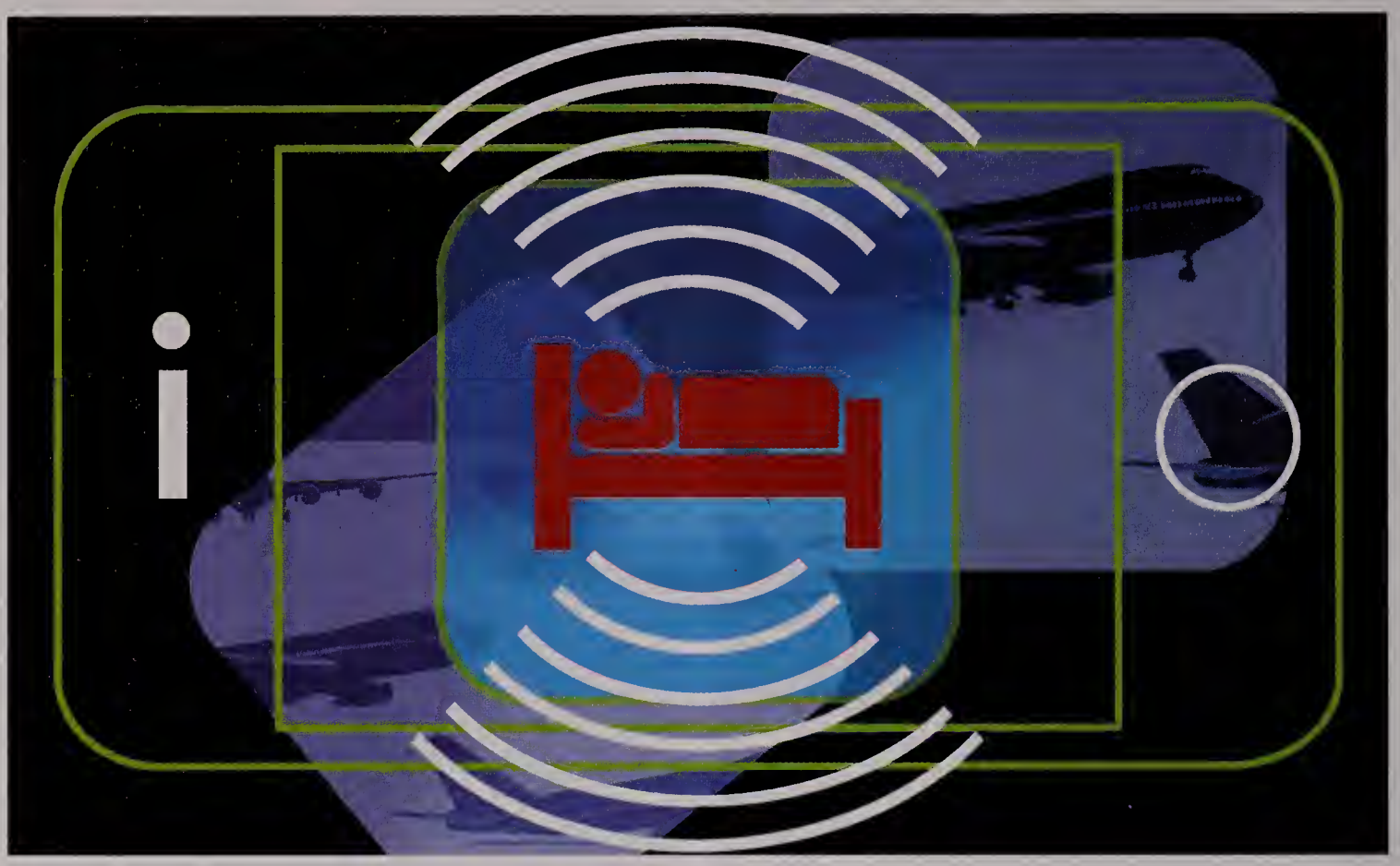
- **Business Consulting**
- **Application Services**
- **IT Infrastructure Services**
- **Business Process Outsourcing**

THE FUTURE IS NOW.
LET'S PUT IT TO WORK.

Cognizant

cognizant.com/futureofwork

© 2011 Cognizant Technology Solutions



Get a Room

Mobile apps from InterContinental Hotels aim to 'turn lookers into bookers' BY KIM S. NASH

InterContinental Hotels Group (IHG) will, of course, take a room reservation no matter how a customer makes it. But it sees enticing sales potential in moving hotel guests to mobile applications.

The $1.6 billion company, which owns the InterContinental Hotels and Resorts, Crowne Plaza, Holiday Inn and four other hotel chains, has rolled out mobile applications for BlackBerry, Android, iPhone and Windows Phone. The strategy: IHG will build native mobile applications offering unique capabilities that aren't suitable for its website, says Bill Keen, director of mobile solutions, Web and interactive marketing.

Native applications are faster, he says, and can take advantage of special features in each operating system, such as location-aware capabilities. Plus, IHG's internal data shows that customers who use mobile apps are more loyal than those who don't. "We want to turn lookers into bookers and turn bookers into loyalists," Keen says.

Members of IHG's Priority Club Rewards program can download an application for their ▸▸▸

10,000 Estimated number of tweets per second sent on the day Steve Jobs died, a new Twitter record. SR7

5M Consumers who will access electronic newspapers on tablets or e-readers by the end of 2011. Juniper Research

ILLUSTRATION BY ANASTASIA VASILAKIS

A Major US Health Insurer

Boosted Employee Productivity by 67%

& Saved $200,000 in Costs. In 1 Year.

How? They gave their staff the ISYS 1-Click FileFinder™

In one click, they enabled their staff to search and find whatever business information they needed – file, email or document. Regardless of format or who created it. Wherever it's stored: internally on any desktop, laptop, server, ERP, CRM or mobile device. Anywhere across the entire Company.

Putting an end to Time Wastage.

ISYS://

1·Click FILEFINDER™

The Productivity-Booster Enterprise Search Solution to Find:
Any File | Any Email | Stored Anywhere | By Anybody | In the Company | In 1 Click

FREE Business Trial

Enter the ISYS Code ISY-M6Q6 at www.isys-search.com
Or call our 24/7 Hotline at 1-800-982-1360
Or go to www.isys-filefinder.com (smartphones/tablets)

ISYS
THE MASTER OF ENTERPRISE SEARCH™

Leading US Medical Institution

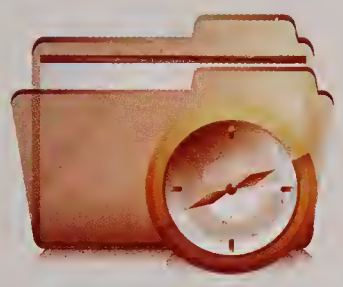
Boosted Researcher Productivity by 400%

By Cutting Search Time from Hours to Just a Few Minutes.

How? They gave their staff the ISYS 1-Click FileFinder™

In one click, they enabled their staff to search and find whatever business information they needed – file, email or document. Regardless of format or who created it. Wherever it's stored: internally on any desktop, laptop, server, ERP, CRM or mobile device. Anywhere across the entire Company.

Putting an end to Time Wastage.



ISYS://

1·Click FILEFINDER™

The Productivity-Booster Enterprise Search Solution to Find:
Any File | Any Email | Stored Anywhere | By Anybody | In the Company | In 1 Click

FREE Business Trial

Enter the ISYS Code ISY-WQWN at www.isys-search.com
Or call our 24/7 Hotline at 1-800-982-1360
Or go to www.isys-filefinder.com (smartphones/tablets)

ISYS
THE MASTER OF ENTERPRISE SEARCH™

CALL FOR ENTRIES

Deadline extended to November 18, 2011

Ones to Watch AWARDS 2012

We're looking for the next generation of standout IT leaders. The **CIO Ones to Watch Award** honors the rising stars in IT—the senior staff destined to become the CIOs of the future—as identified and sponsored by the CIOs of today's leading organizations.

Apply

CIO magazine and the CIO Executive Council's annual Ones to Watch award identifies the rising stars in IT. To be honored, these future CIOs must have demonstrated leadership, driven innovation and delivered value to their business; in short, they will soon be able to head up their own IT organization. The awards are judged by a panel of veteran CIOs experienced in leadership development, and their feedback will be available to all nominees.

Apply today at: **cio.com/otw**

Be Seen

Winners will be honored during the **CIO Leadership Event** April 29-May 1, 2012, in Marco Island, FL, and be featured in the May issue of *CIO* magazine and online at cio.com

Don't Be Late

Nominations accepted through November 18. For more information about this and other prestigious programs visit: **cio.com/cio-awards**

Produced and presented by

CIO
BUSINESS TECHNOLOGY LEADERSHIP

and

CIO CIO Executive Council
Leaders Shaping the Future of Business

▸▸▸ **Mobile apps** Continued from Page 8

smartphones to find hotels, check rates and book and cancel reservations. Of the 58 million people in the club, 300,000 have downloaded at least one of IHG's mobile apps.

Like other companies, IHG is figuring out how to modernize its business model with new technology, says Ken Dulaney, an analyst at Gartner. Companies in retail and other industries have been doing mobile commerce for a while, he says.

Retailer QVC, for example, got into mobile shopping in 2008. It sent text messages to customers with existing accounts, who could reply to buy beauty products, home electronics and other items.

By analyzing how customers book rooms—such as through a mobile device, on the Web, or using a call center or travel agent—IHG has identified patterns that now inform its strategy for mobile technology. For example, IHG found that although some customers may book through the website or call center, many others use a mobile device to navigate to the hotel once in the vicinity. Perhaps more startling, IHG noticed that its mobile customers are big on last-minute booking, with 65 percent of them reserving a room within one day of arriving. Figuring its mobile users often operate in real-time, IHG plans to build location-aware features into its mobile apps to generate maps, directions and real-time coupons for customers approaching a hotel property.

"If we can get the app on...their phone, we can deepen the relationship."

–Bill Keen, Director of Mobile Solutions, IHG

The app might communicate a message tailored to the guest's circumstances, Keen says. "You just landed, it's late, you can check in from here. The restaurant stays open until midnight. Would you like a discount?" Another new feature is a button that allows users to place a one-click call to the hotel's front desk.

Such mobile amenities, he says, will yield repeat customers. "If we can get the app on the deck of their phone, we can deepen the relationship."

Contact Senior Editor Kim S. Nash at *knash@cio.com*. Follow her on Twitter: *twitter.com/knash99*.

crunch

Stellar Service

Most companies aren't very good at customer service, and some industries are much worse than others. But these five companies most outperformed their industry average in consumer ratings of customer service:

Company	Industry	Percentage points above industry average score
USAA	Insurance	+21
Southwest	Airlines	+17
American Express	Credit Card	+16
Discover	Credit card	+16
Edward Jones	Investments	+16

SOURCE: TEMKIN GROUP SURVEY OF 6,000 U.S. CONSUMERS, 2011

H1-B Delays Gum Up Work

IT departments that rely on foreign and offshore workers to staff projects could see their initiatives held up by staffing shortages caused by H-1B visa processing delays and increased scrutiny of guest worker visa programs, according to industry watchers.

It used to take the U.S. Citizenship and Immigration Service (USCIS) two to four weeks to process the H-1B visa applications used to bring skilled workers to the United States on a temporary basis. Today, it takes at least twice that long. According the USCIS website, the average processing time is 60 days, whether it's a new application, a change of status or an extension of stay.

"We've seen a slowdown to eight weeks in most cases," confirms Elizabeth Espin Stern, managing partner with the law firm Baker and McKenzie. "It's a significant concern for new hires."

The bureaucratic holdups create another concern for project time lines. "The delays risk derailing implementation schedules that have very little leeway built into them," says Steven Hall, partner and managing director of CIO services for outsourcing consultancy TPI. Hall also reports that in some cases, workers were refused entry into the country.

–Stephanie Overby

91% U.S. kids ages 2-17 who are gamers. NPD Group **15% College presidents who say most undergrads have taken a class online.** Pew Research Center **327M U.S. wireless device connections, more than the U.S. population.** CTIA

(Left):
Resources Global Professionals
Elisabeth Dick
Regional Managing Director
Lead Client Service Partner

(Right):
Caesars Entertainment
Jonathan Halkyard
SVP & CFO

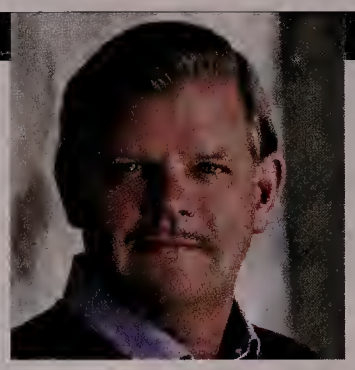
When you're building an empire, there's no time for a learning curve.

The entertainment industry moves fast. Gaming moves even faster. Caesars Entertainment competes in both arenas. So when they needed help restructuring their financial operations, Caesars looked for a consulting firm that was both agile and responsive. They chose Resources. Our highly accomplished team helped get the job done fast. That's how to build a financial empire.

RESOURCES™
GLOBAL PROFESSIONALS

©2011 Resources Global Professionals

Consulting. From the inside out.
resourcesglobal.com



The Employee Mutiny

Today's tech-savvy workers are refusing to use your clunky, desk-bound (and expensive) enterprise applications

BY ADAM HARTUNG

Don't look now, but many company employees are turning off their company-issued laptops and BlackBerrys. They prefer to use their personal devices—sleek, mobile and intuitive—rather than the company-sanctioned technologies perceived as outdated and hard to use.

This emerging trend hit me hard when Dan Matthews, CTO at IFS, an ERP vendor based in Sweden, introduced me to his company's recent survey of 281 managers in manufacturing companies. In a nutshell, the survey says that managers are far less likely to use IT's large, expensive enterprise systems (like ERP and CRM) if the application interface is difficult to use. And they expect to get the corporate information they want by using their iOS or Android devices to gain remote access to corporate systems.

Bypassing Big Systems

Being a bit tongue in cheek, IFS titled the presentation "Does ERP Mean 'Excel Runs Production'?" referring to the tendency of managers—especially younger ones—to bypass the big enterprise systems by using spreadsheets and cloud-based apps to operate their business functions. Seventy-five percent of managers of all ages admitted to using an open-source tool or spreadsheet—or simply refusing to use the system—if the interface is hard to use.

The IFS study shows that there's a disconnect between the way software behaves in employees' personal lives and the way it behaves in corporate America. "Those who use Facebook, Amazon, Orbitz or other online functionality that is entirely intuitive may have a hard time understanding why it is so much more challenging to use the enterprise software functionality necessary to issue a work order or access key performance data," the study says.

Even more surprising, the survey shows that managers are less likely to take a job at a new company if they can't use cloud-based apps and connect their personal devices to the new company's enterprise systems. Further, one-third to two-thirds of the managers (the number is higher among younger managers) say that they're likely to change jobs if their employer's corporate software is too difficult to use.

Moreover, today's managers expect to be working at non-traditional hours—even on vacation. That means accessing enterprise applications and data via iPhones, iPads, or Android-based smartphones and tablets. They won't carry a laptop, and they're growing frustrated by the limitations (including insufficient apps) of BlackBerrys.

There's a disconnect between the way software behaves in employees' personal lives and the way it behaves in corporate America.

In the old days, IT would whip these defectors into shape. A simple call up the chain to the CIO, who would call the CEO, and lickety-split the cowboy manager is brought back into doing things the way IT designed them to be done. But today the defector is just as likely to *be* the COO, CFO or CEO. There's no way for the CIO to complain about adhering to IT policies when fellow C-suite executives are the first to request easier access.

IT is going through a rapid market shift. Its old source of power with users—being the sole provider of technology—is rapidly eroding. Yet, IT is still expected to extract business value from costly enterprise systems. Unless IT moves quickly to implement service layers that will make these systems accessible the way users want, CIOs can expect declining use and more budget cuts.

Today's winners are improving company performance by making enterprise applications accessible: mobile and easy to use. IT departments slow to make this happen will see their companies increasingly struggle to compete with more-agile competitors.

Adam Hartung is a consultant specializing in innovation and the author of the book *Create Marketplace Disruption*. Currently managing partner of Spark Partners, he is a former senior partner with Computer Sciences Corp. and a former executive at DuPont and PepsiCo. Contact him at *AdamHartung.com*.

can you compete in a world of hyper-complexity and constant change?

you **ca**n

In today's fluid, global marketplace business success takes agility and innovation. Most often, that means the cloud. But what's the best way to leverage the cloud? Are you using it to create a radically different business model or to build a stepwise path to innovation?

Either way, CA Technologies can provide cloud management and security solutions that are exceptionally reliable, scalable and easy to use. More than that, our deep experience working in diverse environments provides the valuable insight and control you need to make your company more agile. And more successful.

To see how we can help make your business more agile, visit ca.com

agility
made possible™

ca technologies

Copyright © 2011 CA. All rights reserved.

Twice the Value

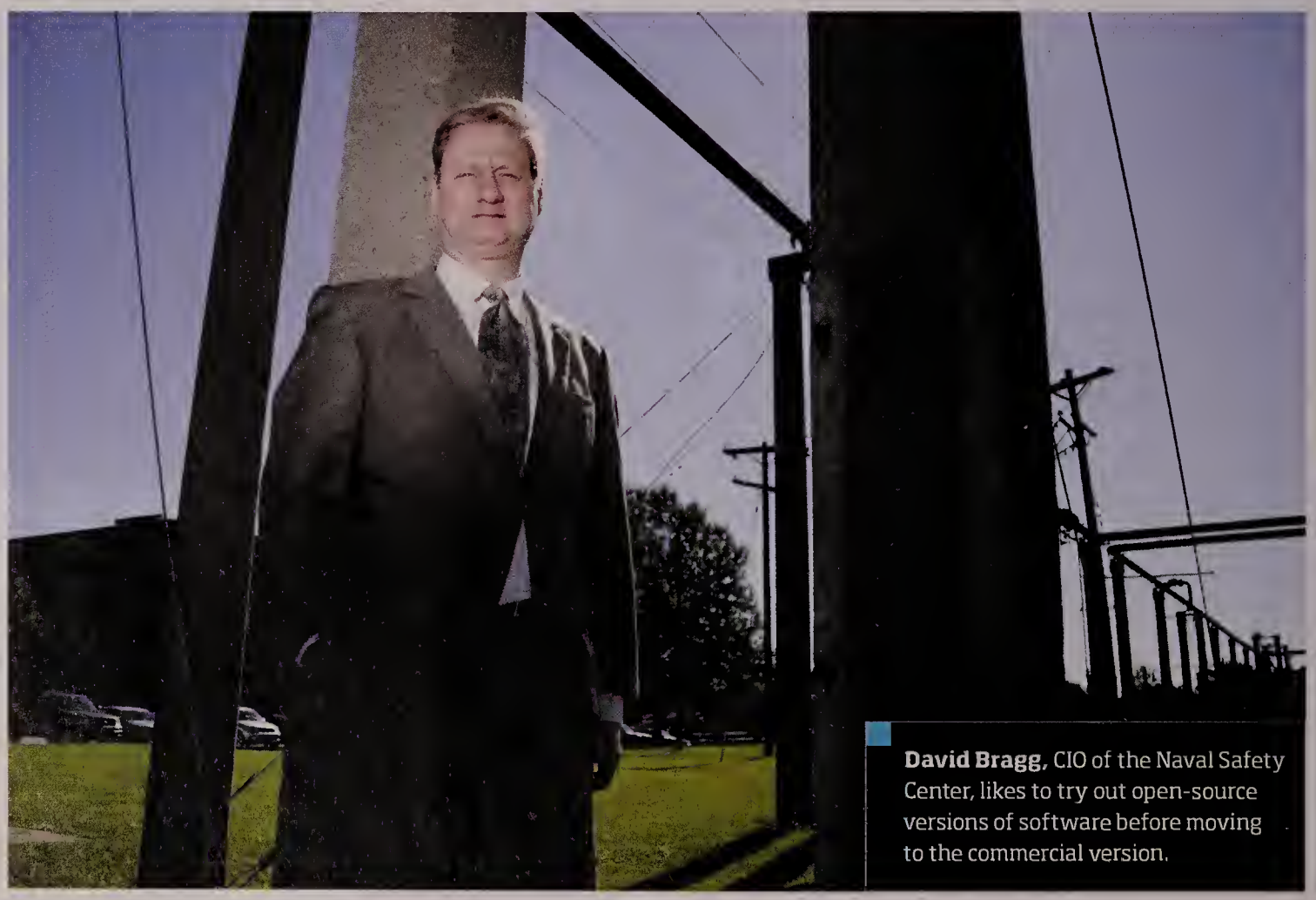
Dual software releases—one open-source and one commercial—can mean savings and security for buyers

BY MARIA KOROLOV

Plenty of companies sell proprietary software: Microsoft, Apple and Oracle, for example. And many companies, such as Red Hat and IBM, make money by selling support, hosting or consulting for open-source software. But what's less known is that companies can release their software as open-source while also selling a commercial version of the same product.

"If you own the copyright, you can do whatever you want," says Lawrence Rosen, an intellectual property attorney with Rosenlaw and Einschlag. "You can license it to person A under one license, and to person B under another."

For example, Jaspersoft, a maker of business intelligence software, offers an open-source "community edition" as a free download that can be modified and used in other products or services, as long as they comply with its open-source license. Jaspersoft also has a commercial edition ▸▸



David Bragg, CIO of the Naval Safety Center, likes to try out open-source versions of software before moving to the commercial version.

PHOTO BY BOB RIVES

Every company is a data company.

No matter what business you're in, your business creates massive amounts of data. Machine data—generated by websites, applications, servers, networks, mobile devices and the like that you rely on every day. By monitoring and analyzing everything from customer clickstreams and transactions to network activity to call records and more, Splunk turns your machine data into valuable insights that can improve the way you do business. It's what we call operational intelligence. Over 3,000 organizations across virtually every industry use Splunk for real-time insights that deepen their customer understanding, improve service, reduce operational costs and mitigate security risks. This is the type of data you can't afford to ignore.

Almost half of the Fortune 100 use Splunk to get operational intelligence from their machine data. These "aha" moments impact top lines, bottom lines and make CEOs smile. Splunk takes your machine data and makes sense of it—IT sense, business sense, dollars and cents. **www.splunk.com/goto/listen**

splunk> listen to your data™

© 2011 Splunk Inc. All Rights Reserved.

▸▸ **Open source** Continued from Page 14

that offers support, managed release cycles and additional functionality.

Some software buyers deliberately seek out such dual-licensed software. David Bragg, CIO of the Navy's Naval Safety Center, says that dual-licensed software can be more secure, more customizable and cheaper than software that's available only in proprietary form.

"At the Department of Defense, we certainly take security seriously," he says. "The nice thing about open source is you get to see the code. It allows you to assess the software for security issues."

Being able to open the hood also allows his team to modify the software if they need to. For example, when his team first rolled out software from Jaspersoft, a little tweaking was needed to integrate it with the agency's security access cards.

Bragg says his team tried another product first, but had issues maintaining it. "We were able to get Jaspersoft to work immediately."

Plus, Bragg says the Jaspersoft application was less expensive than the other software, even though the Naval Safety Center opted for the commercial version, not the free, open-source one.

"When there's an open-source option available, I see that the cost for the commercial version is less, sometimes significantly less, than a commercial proprietary product offering the same capabilities," Bragg says. One reason is that the company is competing against a free product, he says, plus there's a large community of outside testers and developers who work on the open-source project.

The naval center opted for the commercial license to get professional support and patching—but also to ensure that Jaspersoft stays in business so it can continue to support the product.

Bragg says that his team previously used the open-source version of the Solaris operating system, but has since moved to the commercial version, and has also shifted from the open-source version of the JBoss app server to the commercial one.

Another vendor that offers dual licenses is Teleplace, which makes virtual environment software for training, simulations and collaboration. CEO Tony Nemelka says Teleplace decided to make the current version of its proprietary software open-source to increase its community of users and make the software attractive to potential customers who cannot yet afford the full version.

Maria Korolov is a freelance writer and editor based in Massachusetts.

Apple's iOS 5: Security Upgrades Baked Right In

BY TOM KANESHIGE

Apple's latest version of its mobile OS has plenty of benefits for the enterprise. Mobile device management vendor MobileIron says iOS 5 streamlines control of iPhone, iPads and their apps with new security and configuration options—it's a welcome upgrade for IT.

Block Email End-Arounds: More than a few workers have forwarded corporate email to a personal email address. Never mind that a company's policy strictly forbids this. The native iPhone email app makes it easy to perform this end-around.

Some app developers have tried to get around this by taking a sandbox approach. For instance, SAP is testing a product that will allow it to send PGP-encrypted confidential email to employees. Symantec also recently came up with a system that forcibly routs all 3G and Wi-Fi outbound Web and email traffic on the iPad through a virtual private network and detection server. The traffic is monitored and inspected using keywords.

While these solutions sound interesting, CIOs really want Apple to bake some protections into iOS—and it did. With iOS 5, IT can turn off email forwarding so corporate email cannot be forwarded to a personal account, MobileIron says. IT can also prevent apps from sending email.

"IT can now mandate that all email utilizes S/MIME, providing greater security and ensuring message integrity," wrote MobileIron in an email to customers on how iOS will affect them.

Remote Wipe Apps and Secure iCloud: When asked about data loss prevention on the iPhone or iPad, many CIOs will say that they can remotely wipe devices. While this is true, a data kill switch is a last resort. "By the time you wipe, you're way over the edge," says Aaron Freimark, IT director at Tekserve, a services firm helping Fortune 1000 companies adopt the iPad.

"You want to know who's taking screenshots and emailing them to friends," Freimark says. "You can't really lock this down today. You want to be able to wipe one app at a time, or maybe business apps [only]. Employees are not going to like it if you wipe the whole device."

With iOS 5, device management vendors gain more control. If users delete the management profile on their devices, IT can force a selective wipe of corporate data that includes email, calendar, contacts and enterprise apps, MobileIron says.

In addition to iOS 5, Apple launched its iCloud storage service. "IT can now disallow apps from syncing with iCloud or iTunes," MobileIron says.

Senior Online Writer Tom Kaneshige covers Apple and networking for CIO.com. Follow him on Twitter *twitter.com/kaneshige*.

Experis™ IT
ManpowerGroup

STAYING AHEAD IS HUMANLY POSSIBLE

At Experis™ IT, we know what drives your company: change. That's why we deliver qualified IT professionals with the skills you need and the passion you expect to keep moving forward – along with a wide range of scalable project solutions. We bring talent and expertise together to focus on the mission-critical of the day, month or year. From global enterprise-wide services to specialty projects, we'll help you harness the power of technology to make smarter, faster decisions, connect more strongly with your customers, and drive innovation in your marketplace. All this, to help keep your company at the forefront.

Learn more at experis.us/cio

©2011 ManpowerGroup. All rights reserved.

LEGAL AFFAIRS

Outsourcers Catch a Break

India clarifies ambiguous new privacy rules by exempting its outsourcing industry from strict requirements **BY JOHN RIBEIRO**

Personal data sent to India by customers outsourcing IT work there will not be covered by India's new privacy rules, the government announced in late August. The clarification was a huge relief to India's large outsourcing industry.

The data privacy rules, issued in April, require companies or their intermediaries to get written consent from individuals about the use of the sensitive personal information they collect. But it would have been very difficult for Indian outsourcers to operate if they had to get written consent from every foreign citizen whose personal data moves through India's vast collection of call centers and other outsourcing operations.

India's Ministry of Communications and Information Technology issued a clarification saying the new rules apply only to Indian companies that collect information from individuals. That ended confusion over whether U.S. and European companies sending data for processing to Indian outsourcers would have to follow India's privacy rules while collecting data in their countries.

The rules define "sensitive data" as including passwords, financial information, medical conditions, sexual orientation and biometric information.

It is now clear that it is the companies collecting and sending the data—not outsourcers—that are responsible for protecting the privacy of the data according to the rules of the countries they operate in, says Kamlesh Bajaj, CEO of the Data Security Council of India. The council was set up by India's National Association of Software and Service Companies to set standards for data security and privacy for outsourcers.

However, the preferential treatment given to outsourcers could be struck down in court, says Pavan Duggal, a cyberlaw consultant and advocate in India's Supreme Court. The clarification has not been issued under any provision of the country's IT Act, and in fact violates the spirit of the IT Act, which does not limit the jurisdiction of its laws to companies within India, Duggal says.

The clarification is also vague and could lead to a variety of companies claiming to be exempt from the personal data rules, he adds.

John Ribeiro is a correspondent with IDG News Service.

SEC Updates Cyberattack Disclosure Rules

Public companies may need to look more closely at their exposure to cyberattacks after new guidelines were released by the Securities and Exchange Commission (SEC) last month.

Public companies are required to disclose incidents that could have a material impact on their business. The new guidelines specifically mention cyberattacks and say they need to be reported in some cases.

Companies should disclose the risk of cyber-incidents "if these issues are among the most significant factors that make an investment in the company speculative or risky," say the guidelines.

To determine that, companies need to look at factors such as how likely it is they will be targeted by an attack and what the cost of an attack might be, in terms of disruption to operations or loss of sensitive data. They may also be required to share details of hacking incidents that took place in the past.

"For example, if a registrant experienced a material cyberattack in which malware was embedded in its systems and customer data was compromised, it likely would not be sufficient for the registrant to disclose that there is a risk that such an attack may occur." Instead, it would probably be required to reveal specifics of the incident, the SEC statement said.

The risk of cyberattacks has always been a potential disclosure issue, but the SEC guidance "really highlights the issue and brings it to the fore," according to David Navetta, a founding partner of Information Law Group, which provides legal services related to IT matters.

A post on Navetta's company blog says one interpretation of the guidelines is that companies are going to have to more carefully estimate the effect of cyber-incidents and go well beyond the privacy-related security issues where most companies have focused. ***–James Niccolai***

CAN YOUR BUSINESS SEE BETWEEN THE DOTS?

You have to be able to see a threat to avoid it. That's why Verisign® iDefense® services provide around-the-clock visibility into the latest cyber intelligence related to vulnerabilities, malicious code and global threats—all gathered by our elite team of security experts from around the world. Let our experience running .com and .net for more than a decade help you stay ahead of emerging threats, and discover how we can help protect your business between the dots.

See the Verisign iDefense 2011 trends by downloading our free report at **VerisignInc.com/see**.

© 2011 VeriSign, Inc. All rights reserved. VERISIGN; the Verisign logo; and other trademarks, service marks and Verisign designs are registered or unregistered trademarks of VeriSign, Inc., and its subsidiaries in the United States and in foreign countries. All other trademarks are property of their respective owners.

VERISIGN™

Serious Dividends

SAP's Business Objects unit has upgraded its suite of analytics tools for data-driven decisions

BY CHRIS KANARACUS

THE PITCH

SAP got into business intelligence in a big way with the 2007 acquisition of Business Objects. "For every use case in BI, they've got a good tool," says Forrester Research analyst Boris Evelson.

Moreover, Business Objects products aren't dependent on the broader SAP product stack, according to Steve Lucas, general manager of business analytics and technology at SAP. "Half of our [Business Objects] development resources are focused on non-SAP use cases," he says. "Over half of our customers have nothing from SAP except analytics."

SAP is also positioning its new Hana in-memory database engine as a foundation for the core Business Objects suite and a new series of specialized analytics applications.

Many Business Objects customers are large enterprises, but SAP also sells subsets of the full suite to small and midsize companies.

THE CATCH

Despite all the strengths of Business Objects' products, they have lacked a unified feel, giving the user a somewhat disjointed experience, Evelson says.

However, the recent release of Business Objects 4.0 solves that problem, with a unified interface, a common data-access layer and other improvements, Lucas says.

While acknowledging that 4.0 is "a step in the right direction," Evelson maintains that SAP has more integration work to do "under the covers."

The other problem with 4.0 is its late arrival. Originally, SAP talked about a general availability date in 2010. Then it held a launch event in February of this year, where it said the release would be in May. In the end, the date slipped to mid-September.

"When a vendor's late by a few weeks or months, it's one thing," Evelson says. But with yearlong delays, "how can you as a buyer make plans and depend on them?"

SAP held off the general release for legitimate and important reasons, according to Lucas: "We set some pretty stringent go-live criteria for ourselves. If we didn't get to those, we weren't going to go live."

Only a handful of customers participating in the 4.0 ramp-up program—SAP's name for when products are out of beta but not yet in mainstream release—were still experiencing some issues by the end, he adds.

"Some of it was implementation, some of it was customers requesting features that weren't really bug [fixes]," Lucas says.

THE COMPANY

SAP

Headquarters: Walldorf, Germany, and Palo Alto, Calif.

Employees: 53,500

2010 Revenue: $17.25 billion

Co-CEOs: Jim Hagemann Snabe and Bill McDermott

What They Do: SAP acquired Business Objects in 1997 to establish itself in the hot market for business intelligence software. Business Objects has a robust suite of BI software (now up to version 4.0) and a new BI app for the iPad.

THE SCORE

Arch Coal is currently running version 3.1 of the Business Objects BI suite with solid success, says Jamie Oswald, a senior BI analyst there.

The mining company, which doesn't run any other applications from SAP, is looking to upgrade to 4.0 "probably at the beginning of next year," Oswald says. Right now, work on upgrading the company's mining supply chain software is a top priority.

"I like the Business Objects road map of bringing these tools together and still making them platform-agnostic," Oswald says.

The software has already been paying serious dividends, he adds. For example, Arch Coal is now able to track and manage which equipment parts are still under warranty as they need to be replaced, which has led to significant cost savings.

Chris Kanaracus is a U.S. correspondent with IDG News Service.

LEED® by example.

Platinum certified. That's what the U.S. Green Building Council® awarded Johnson Controls for being a model of energy efficiency and sustainability at our Wisconsin headquarters campus. This represents the largest concentration of LEED Platinum buildings—four—on one site ever awarded.

Even more impressive is what we did to earn this recognition. Hundreds of wireless controllers and sensors are linked to our Metasys® building management system, which continuously monitors and controls energy use. The result? Energy usage slashed by 21% even as campus space doubled. Onsite solar electricity generation reduces greenhouse gas emissions by 852,000 pounds annually. Low-flow fixtures and rainwater recycling save 1.7 million gallons of water a year. These are just some of the hundreds of improvements we have made to earn LEED Platinum distinction.

Payback? We expect to recoup our investment in energy and operational efficiency within eight years. And our employees are even more engaged with an enhanced work environment that features desktop control of workspace temperature, lighting, airflow and white noise.

We have made our headquarters a campus that works. From educational institutions and hospitals, to government facilities and commercial buildings, Johnson Controls can make your buildings work for you more efficiently, sustainably and profitably. To learn more, visit MakeYourBuildingsWork.com.

CR's 100 Best 2011

Johnson Controls

LEED® (Leadership in Energy and Environmental Design) is a registered trademark of the U.S. Green Building Council®

Johnson Controls ranked #1 in *Corporate Responsibility Magazine*'s 12th annual "100 Best Corporate Citizens List"

Building Bridges

Get over your service mentality and step up to a true business partnership

BY DIANE FRANK

Technology runs the world these days, but CIOs don't. More often than not when a business's mission is on the line, CIOs instead encounter the type of reaction Toyota Motor Sales USA VP and CIO Zack Hicks got from one fellow executive during the height of the company's vehicle recalls in 2010: *Our hair's on fire; we don't have time for an IT project.*

The tendency of business execs to see IT as being useful only for projects is a huge challenge for CIOs at every size enterprise, in every industry. At Toyota, Hicks has long focused his IT team on understanding what people throughout the company do every day to shorten the time between expressing a need and getting a solution, which led to many business improvements. But even if the IT group sees itself as a strategic player, the proof is ultimately whether the rest of the company feels the same way.

Recognizing that public perception was one of Toyota's main concerns during the recalls, an IT group that was testing a business analytics tool decided to apply it to complaints data received by the National Highway Traffic Safety Administration (NHTSA). "Within six hours, we had tremendous insight into what NHTSA's data was actually saying versus what the press was saying," Hicks says. The data showed some areas where Toyota could help address consumer and investor fears.

But holding that information wasn't enough. It was just as important that Hicks, after being brushed away by the first executive he approached, didn't back off from demonstrating IT's potential value as a partner. (It would have been easy, he admits, to fall back into focusing on the back-end systems that were breaking under the strain of the increased volume of calls, which shot from the usual 3,000 a day to 92,000 a day during the crisis.) Instead, he took those results directly to his president, who insisted that the entire executive team look at the tool to see if they could leverage it.

PHOTO BY DANIEL HENNESSY

After **Zack Hicks,** VP and CIO of Toyota Motor Sales USA, and his team helped Toyota with a PR crisis, senior executives started to look at the IT function as a strategic business partner.

The episode was a dramatic demonstration of IT's ability to be part of the strategic business conversation.

"This is where knowing I have a team that knows enough about our business—and being willing to make that strategic bet—really paid off," Hicks says. With this example, the analytics project moved quickly into production to help functions across the company build and sell the cars consumers want.

In any industry, a cornerstone for any attempt to change the perception of IT throughout the business is improving the relationship the CIO has with other C-level executives and the relationships maintained by IT staffers with other teams.

Members of the CIO Executive Council, a global peer advisory service and professional association founded by *CIO*'s publisher, have codified this relationship-management effort in a framework called the Future-State CIO Journey, where stakeholder relationships and perceptions advance along a continuum. The spectrum starts with the IT function being perceived as a cost center, moving to a credible service provider, then an influential IT partner and, ultimately, a strategic business peer that creates game-changing value.

But IT leaders must be able to translate that framework into real actions based on real problems, as Hicks and his team did, because of their understanding of Toyota's business needs during that PR crisis.

BUILD A CREDIBLE FOUNDATION

In the absence of strong business relationships, it's easy to say that the first step is to establish the IT group's credibility, leading CIOs say. But establishing trust is personal and complex. It's especially difficult for a new CIO brought in to turn around an underperforming IT shop, because the relationships with the business are probably already poor. If the CIO comes in on more neutral terms, starting with a blank slate, there's a better chance of building credibility that goes beyond just keeping the email flowing.

When Robert Webb joined Hilton Worldwide two years ago, he found himself on the hot seat. There were a number of projects already teed up for execution, and IT was still struggling to be an influential partner in determining which projects should go forward. Webb latched on to several projects that could have broader impact on the company and provide a showcase for IT's capabilities.

"In my world, the way you build trust is by making promises and keeping promises—repeatedly—and then there's the opportunity to build a deeper relationship," he says.

"The worst thing any CIO can do is oversell and underdeliver," agrees Kevin Kern, executive vice president and CTO of global operations and technology at First Data, one of the largest electronic commerce and payment processing providers.

Strained Relations

How Hilton's CIO uses candid communications to work through difficult times—and avoid the blame game

Relationships between the CIO and business executives will inevitably become strained, with broken promises and eroding trust. So how do you keep them from going completely off the rails?

"That's the time that is actually the true test of leadership," says Robert Webb, CIO of Hilton Worldwide. "It's the ability to know when that's happening—to sense it and see it—but also to be proactively communicating when you know that's starting to occur."

Webb and his team have helped develop a new Expanded Rewards loyalty program, which allows guests to use points and cash for a wider range of perks at Hilton properties. It's a complex system that's already in place at several thousand hotels. When Webb started working with the business sponsor of the project, he admits that neither of them thought they would succeed. In fact, the project didn't really begin to click, he admits, until people from IT, marketing, HR, finance and other departments on the steering committee worked through the change management and business process issues in 85 countries and 10 brands. Now the program is close to full deployment.

But not every effort has gone so smoothly. Two years ago, Hilton decided to outsource the hotel help desk to a large global outsourcer—a fairly standard move for a large company. However, no one had recognized that this wasn't a traditional break-fix support group; it handled intricate, business-specific processes for some of Hilton's most sensitive partners. "And some of these people were not happy about the communications challenge of explaining to somebody who's not worked in the inside of a hotel what it means to, for example, do the night audits," Webb says.

When he got together with the brand leaders involved in that partnership, instead of spreading blame, they examined the IT and business metrics of the contract. It quickly became clear that not only did the metrics need to be redefined, but that the business goal was no longer the one they had identified at the outset. They talked openly about how the criteria for success had changed.

"We're only able to solve this with truthful, honest communication," Webb says. "When people say 'This is hard, I'm not sure I'm with you anymore,' you need to get everyone to remember it's about one team, one vision, and let's get grounded on why we did this."

–D.F.

Webb believes there's no such thing as too much communication. At Hilton, he now has a number of channels for getting his message out: a monthly update on critical enterprise initiatives, a quarterly "technology operating review" with IT and business leaders that delves into the status of major projects, and weekly steering committee meetings for each function-specific project. (For more on Hilton's projects and relationships, see "Strained Relations," opposite page.)

"It can't be passive communication; it needs to be active," Webb says. "Email is great for scheduling meetings, but it's the steering committees where we're working through really difficult issues together, and making promises and keeping promises, where the foundations of trust are established."

Sometimes, though, you have to work up to being able to make promises. Food chain Red Robin Gourmet Burgers has grown rapidly over the last decade, and executives turned to CIO Chris Laping four years ago because the IT department wasn't at a point where it could be involved in transforming business processes, much less any attempt to drive such change. When he came on, "No one would talk to IT unless their mouse wasn't working," he says.

The IT staff needed a basic shift in mind-set to improve how rest of the business perceived the department. Laping started by changing the metrics that defined IT's goals from the standard system-based ones—such as the always-popular number of help desk tickets resolved, or delivery of a project on time and on budget—to ones that reflect business process change and value to the company. Today, all major IT projects at Red Robin are measured by business metrics. And the IT team's work isn't done until the business actually sees the promised benefits. "You have to build a plan that does more than just turn the system on," Laping says. At Red Robin, those plans nurture the system beyond rollout to encourage and enable adoption of the system. "Because you know darn well that if you don't do that, that finger is going to come pointing at you when the business isn't getting what they expected from the system."

Over the past few years, this has changed the game for both sides. As IT has delivered on more than just technology, IT staffers have come to expect to be involved through the entire lifecycle of the system, and business leaders and users now expect IT to be part of transformation efforts.

Even now, Laping's people are working on one of the company's most widely anticipated transformational advances: the Red Royalty customer loyalty program that launched in January after a two-year effort. While the back-end technology involves transactional databases and data analytics, the focus is really on achieving the business goals of creating a better customer experience and improving customer retention. A high-level business team will stay on through at least the end of this year to provide any support necessary and help improve the loyalty program to make sure it's producing the expected benefits at a level everyone is happy with. That new role for Red Robin's IT was formalized last year when incoming CEO Stephen Carley named Laping senior vice president of business transformation, in addition to CIO.

Perception Filter

Rank your IT-business relationship on this three-level scale

☐ **Service Provider** 1

At this level, your IT organization has established credibility based on running the IT function efficiently and effectively.

☐ **IT Partner** 2

If your IT organization is focused on the enterprise and regularly influencing business leaders, it is seen as a trusted partner.

☐ **Business Peer** 3

Once your IT organization is seen as a true business peer, you and your staff have the credibility you need to engage in developing and driving strategy, winning new market share, and innovating for users and customers.

To test your IT organization's relationship with business partners—and discover how they view that relationship—download the stakeholder assessment quiz at **http://council.cio.com/future_state.html**

MANAGING THE RELATIONSHIPS

Relationships forged during hard times can last, but only if you work at it, Hicks says. After the initial recalls at Toyota, when IT provided public relations assistance, Hicks found himself with new allies. The senior management team has started to look at the IT function as a provider of business solutions and a partner in process change, not just a systems provider. This affords new opportunities for him and his line-of-business direct reports to influence the business and discuss the future of each product line.

But that influence has to be applied judiciously, not all the time.

"I'm always trying to calibrate: Is this the right time to be leaning in and making some of those changes? Or is this a time when they've got a busy cycle and I need to back off and give them some freedom?" he says. "It's about actively managing those relationships."

The payoff from better relationships is that business executives listen to IT's perspective rather than ignoring it or dismissing it out of hand. For example, when Toyota was developing its Entune "connected vehicle" initiative, Hicks acknowledged the growing importance of telematics in the automotive industry but also pointed out the potential risks of what is essentially "a device driving down the road." Hicks asked the other executives whether Toyota could handle the public outcry if proper

Leslie Jones, SVP and CIO at Motorola Solutions, insists that IT's metrics must focus on business results–even after systems have been deployed and adopted.

security and privacy controls were not built into the in-car multimedia system.

The executives got the point. The result is that Toyota's Entune initiative is moving ahead but Hicks is now fully involved in the project and is head of the senior management task force that's ensuring the company is creating a safe and secure service.

Sometimes, by working side-by-side, IT and other business leaders can solve each others' problems. At First Data, CTO Kern was having trouble managing the many business requests for IT development projects from the groups that had joined the company through acquisition. While acquisition was a significant part of the company's growth, it had created an environment where many groups were operating autonomously with uncoordinated requests. So Kern started work on a global operating model that would establish priorities for those requests. As it turns out, the business executive in charge of new-product development had similar concerns.

Mark Herrington, First Data's executive vice president of global product management and innovation, wanted to establish processes for determining which new-product ideas should be developed. "We wanted to effect a 180-degree turn, from growth by acquisition to growth by organic product development," he says. But one of the big holdups was the lack of prioritization for IT development requests, leading to far more customization and one-off IT systems than were healthy for the company, Herrington says. More than 280 people had authority to submit those requests, and the loudest requester often got their order fulfilled first.

So Herrington set out to create a single stream of prioritized requests from the product-development side. When he reached out to IT with this goal, he was pleased to discover that it matched up with Kern's global operating model for IT.

Herrington and Kern have now built joint processes for both sides to manage requests for product development and delivery. All requests are now driven by solution maps that define needs and goals across functions, instead of by group or geography. The result is that there are only two streams of requests to IT: one from North America and one from the rest of the globe. "This helps us all set expectations for external customers, and

PHOTO BY KEVIN MIYAZAKI

Moving healthcare forward

IT and communications solutions for elevated performance

Our mission is to fulfill your vision of healthcare — in patient care and experience, in staff collaboration and communication, in business continuity and data security, and in the efficient running of your institution. With tailor-made solutions built on an in-depth understanding of your unique needs, strategies and objectives. Solutions that provide easy access to information and fast, effective communications among patients and staff —on site and at remote locations—reducing delays and improving quality of care. Learn how NEC's solutions and expertise in voice and data communications, networks and data storage can elevate your performance.

Learn how you can elevate your performance at **www.nec.com**/healthcare

Empowered by Innovation NEC

for internal colleagues," Kern says. "When we make decisions, then we all need to get into the fold and start executing."

ELIMINATE THE PHRASE "I.T. AND THE BUSINESS"

The goal of all this credibility, trust, alignment and partnership is for IT to be seen as a true peer, engaged in developing strategy to reach shared goals. IT is no more separate from the company (in fact or language) than finance or HR. This is a goal that few have reached. But the number of IT groups that can claim the distinction should grow every year as CIOs like Hicks, Webb, Laping and Kern continue reshaping how they and their teams engage with internal business stakeholders.

"My current and ultimate goal is that there is absolutely no distinction between IT and the business," says Leslie Jones, senior vice president and CIO at Motorola Solutions. And what she's done should sound familiar.

When she took the CIO role at the company in 2008, the first thing she changed was the IT staff's focus on technology. The mind-set, she says, had to become: "We're in the business; our field just happens to be IT."

To enforce this, as others have, she shifted the metrics of her group from IT-specific to business criteria. But she also eliminated the opportunities to fall back on old patterns—such as IT-only town halls—because she recognizes that relationships with peers cannot change if IT holds itself separate.

Over the past four years, Jones has appointed three IT people to work in other departments, and they've become so much a part of those other teams that Jones admits she isn't part of their conversations and everyday decisions. Many leaders talk about embedding IT staff in business functions, or instituting functional rotations to familiarize staff with other parts of the company. Both techniques can have a significant impact if there was no interaction before. But it is obvious when those steps are still superficial or temporary arrangements, as opposed to when they are actually effective, Jones says. Those three people from her staff have proved time and again to both Jones and her executive counterparts that "they have a considerably more real, profound understanding of the business environment, needs and aspirations than they could ever hope to have by attending PowerPoint festivals," she says. Now they are part of their business operations teams, determining strategies and plans for new customer services along with the other leaders in those groups. And then those teams turn to IT to help execute those plans.

It's now clear to everyone at Motorola Solutions that IT's metrics must be changed to focus on business results. Period. That's true even after the systems have been deployed and adopted. For example, once a system is up and running, discussions must focus on topics such as what it would cost the business if there is an outage—not how much time it took IT to get everything back up. "And it doesn't matter whose 'fault' it was," Jones says. For example, when Hurricane Irene hit the east coast in September, she knew that if there were a problem with an IT-enabled business service, and a cost to fix it, that would be her responsibility.

For Jones, the primary sign of success is IT's place on her company's operational calendar, which identifies which initiatives will be done when. Historically, IT went through its own strategic and operational planning, but then the business asked for IT's planning to be integrated into the company-wide calendar. "Not to put too fine a point on it," Jones says, "but the clearest indication of success is when they take money away from other people and give it to you, and that's exactly what's happened these last few years."

> "If you establish yourself as a **technology guru**, or an **IT advocate**, you are really declaring yourself something quite **alien** to the business."
>
> -Leslie Jones, SVP and CIO, Motorola Solutions

This isn't just the CIO's view. Whether the discussion is about company strategy, R&D prioritization, go-to-market strategies or any other enterprise issue, Jones is there, says Chairman and CEO Greg Brown. "She's in the fabric of the strategic and operational dialogue, and not at the tail end."

In fact, the company is now two years into a strategy to become entirely digital, changing the processes—and therefore the systems—behind every function from the ground up. No small part of the reason that this is possible now, rather than three or five years ago, is what Jones has done with the people in her group and the role they play in the company, Brown says.

Motorola Solutions stands as testament to the fact that the goal of becoming a business peer is within reach. The real difference between this company and most others is the time spent focused on the objective. And the last step, perhaps, is one the CIO alone must take: becoming a leader who thinks not of what's best for IT, but of what's best for the customers, clients, users and stakeholders.

"If you establish yourself as a technology guru, or an IT advocate, you are really declaring yourself something quite alien to the business," Jones says. "If you can establish yourself as a person of a general manager mind-set, then I think you stand a very good chance of being successful in this kind of relationship with your business." CIO

Contact CIO Executive Council Editorial Manager Diane Frank at *dfronk@cio.com*. Follow her on Twitter: *twitter.com/dtwfronk*.

Your iPhone/iPad Idea to Fruition in 2 Steps

1. Bring your application idea to Zco
2. Zco designs and develops your app

Stumped by this puzzle? The answer is on our website

One of the Largest Custom Mobile App Developers in the World

(Serving Fortune 20 Companies to Small Businesses)

iPhone | iPad | Blackberry | Android | WebOs

Symbian | Windows Phone | Palm Pre | Kindle

Digital Marketing & Enterprise Software

.Net | Java | PHP | ColdFusion | SEO

Video | 3D Animation | iAd

DVD Find — Entertainment

Multiply Dots — Education

Eck App — Games

KungFu Spinner — Games

Kinesio Capture — Sports

Dry Fire Trainer — Sports

eRoentgen — Medical

NHPR — News

My Days Pay — Lifestyle

Color Car Mania — Games

Discovery Game — Games

AutoVol — Utility

Knockoff — Games

Obama Tickle — Entertainment

Lil' S.P.E — Social Networking

Hypnosis on the Run — Lifestyle

bpServ — Business

RM Monitor — Business

NameCatcher — Lifestyle

ClassTime Schedule — Education

Abbo EMR — Medical

Hospitality iCoach — Business

Zco

20+ Years of High Quality Service

www.zco.com

603.881.9200

SALES AND SERVICES

CIO SALES OFFICES

President and CEO
Michael Friedenberg
508 935-4310

SVP, Group Publisher & CMO
Bob Melk • 415 975-2685

Publisher Emeritus
Gary J. Beach • 508 935-4202

Vice President/Publisher of *CIO*
Adam Dennison
508 935-4087

Sales Operations Manager
Christine McKay
508 988-7836

Senior Sales Operations Coordinator
Bethany Whiffin
508 935-4092

EAST COAST
Regional Sales Manager
Ellie St. Louis • 201 634-2332

Sales Associate
Jaime Ganson
508 766-5445

NEW ENGLAND/CENTRAL
Account Director
Brian Keenan • 847 508-8428

Sales Associate
Lauren Costello • 508 935-4154

WEST COAST
Regional Sales Manager
Kevin Ebmeyer • 415 975-2684

Regional Sales Manager
Ai Collins • 415 975-2686

Advertising Sales Associates
Marty Anderson • 415 975-2683
Meghan Shepp • 415 975-2687

CUSTOM SOLUTIONS GROUP

Senior Vice President
Charles Lee • 508 935 4796

Eastern Sales Director
Brett Ferry • 508 988-6941

Senior Editorial Director
Jim Malone

Editorial Director
Bill Laberis

Senior Managing Editors
Debra Bulkeley
Stan Gibson

Managing Editors
Joyce Chutchian

Senior Project Operations Manager
Amy Greenleaf

Project Managers
Karen Capland
Maro Eremyan
Alison Lutes

Program Coordinator
Corissa Donaghy

Designer
Kim Han

ONLINE SALES

Senior Vice President, Online Sales
Brian Glynn • 508 935-4586

Online Regional Sales Manager, East Coast
Richard Hartman
508 935-4487

Online Regional Sales Managers, West Coast
Stacy Byrne • 415 975-2681
Erika Karr • 415 978-3329

Director of Online Account Services
Danielle Thorne
508 988-7969

Online Account Services Team Leads
Beverly Lloyd • 508 988-6765
Tara Shea • 508 988-7877

PRODUCTION

VP, Manufacturing
Chris Cuoco • 508 988-7565

Production Manager
Lisa M. Stevenson
508 935-4591

LIST SERVICES

Contact Stephen Tozeski of IDG List Services at 508 370-0822 or *stozeski@idglist.com.*

CIO is published in the U.S. as well as in:

Argentina, CIO Cono Sur
http://conosur.cio.com

Australia, CIO Australia
www.cio.idg.com.ou

Brazil, CIO
www.cio.com.br

Bulgaria, CIO Bulgaria
www.cio.bg

Canada, CIO Canada
cio.itworldconodo.com

China, CEOCIO China
www.ceocio.com.cn

Finland, CIO
www.cio.fi

France, CIO France
www.cio-online.com

Germany, CIO IT-Strategie für Manager
www.cio.de

India, CIO India
www.cio.in

Japan, CIO Magazine Japan
www.ciojp.com

New Zealand, CIO New Zealand
www.cio.co.nz

Norway, CIO Computerworld Forum
www.idg.no/cio

Pakistan, CIO Pakistan
www.ciopokiston.com

Poland, CIO
www.cio.cxo.pl

Portugal, CXO
www.cxo.com.pt/

Russia, Chief Information Officer Magazine
www.cio.ru

Singapore, CIO Asia
www.cio-osio.com

South Korea, CIO Korea
www.ciokoreo.com

Sweden, CIO Sweden
www.cio.idg.se

Taiwan, CIO Taiwan
www.cio.com.tw

United Kingdom, CIO Magazine
www.cio.co.uk

INDEX OF COMPANIES AND ADVERTISERS

Page numbers refer to the first page of the article(s) in which the company has a substantial mention. This index is provided as a service to readers. The publisher does not assume any liability for errors or omissions.

COMPANY INDEX

Apple, Inc. . . . 16
Arch Coal, Inc. . . . 20
First Data Corp. . . . 24
Forrester Research, Inc. . . . 20
Gartner, Inc. . . . 10
Hilton Worldwide. . . . 24
IFS. . . . 12
InterContinental Hotels Group PLC (IHG) . . . 8
QVC, Inc. . . . 10
Red Robin Gourmet Burgers, Inc. . . . 25
Rosenlaw and Einschlag . . . 14
SAP AG. . . . 20
Tekserve Corp. . . . 16
Toyota Motor Sales USA, Inc. . . . 22
United States Navy . . . 16

ADVERTISER INDEX

Avaya, Inc. . . . C2
CA Technologies. . . . 13
CIO Marketplace . . . 31
CIO Ones to Watch Call for Entries . . . 9
Cognizant Technology Solutions . . . C1, 7
IBM Corp. . . . C4
ISYS Search Software . . . 8a
Johnson Controls . . . 21
ManpowerGroup . . . 17
NEC . . . 27
Resources Global Professionals . . . 11
SMS Memory Module Assembly . . . 31
SonicWALL, Inc. . . . C3
Splunk, Inc. . . . 15
TechDispenser . . . 31
Verisign, Inc. . . . 19
Verizon Wireless . . . 5
VMware . . . 3
Zco Corp. . . . 29

CIO CONTACT INFORMATION

Editorial, Advertising and Business Offices: CXO Media Inc., 492 Old Connecticut Path, P.O. Box 9208, Framingham, MA 01701-9208, 508 872-0080.

CIO (ISSN 0894-9301) is published monthly, with additional issues in May, June, September, October and November by CXO Media Inc. Periodicals postage paid at Framingham, MA, and at additional mailing offices. Canada Publications Mail Agreement Number PM40063731. CANADIAN POSTMASTER: Please return undeliverable copy to P.O. Box 1632, Windsor, ON N9A 7C9.

Reprints & Permissions: For information about reprints and copyright permissions, please contact The YGS Group, 800-290-5460, ext. 100, *cio@theygsgroup.com.*

Photocopy Rights: Permission to photocopy for internal or personal use or the internal or personal use of specific clients is granted by *CIO* for users through the Copyright Clearance Center, provided that a fee of $3.50 per copy of the article is paid directly to Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01970. www.copyright.com. Please specify: ISSN 0894-9301. Permission to photocopy does not extend to contributed articles followed by this symbol: ‡.

Subscriptions: *CIO* is free to qualified information executives. To apply, use our online subscription form at *http://www.cio.com/subscription-services.* Subscriptions are also available on a paid basis at a rate of $129 for the United States and Canada, $195 International (payable in U.S. funds only) and may be ordered online at *http://www.cio.com/subscription-services.* Or address inquiries to *CIO*, P.O. Box 489, Northbrook, IL 60065-0489; 866 354-1125. Please allow four to six weeks for a new subscription to begin. The single copy price is $9 for the United States and Canada, and $15 International. Digital annual subscription $29. Prepayment is required, payable in U.S. funds.

Change of Address: Please go to *http://www.cio.com/subscription-services* and follow the online instructions.w

Postmaster: Send change of address to *CIO*, P.O. Box 489, Northbrook, IL 60065-9816. Printed in the U.S.A.

Q: Want to reach 140,000 readers?

A: Place your ad here

The Marketplace section of

CIO

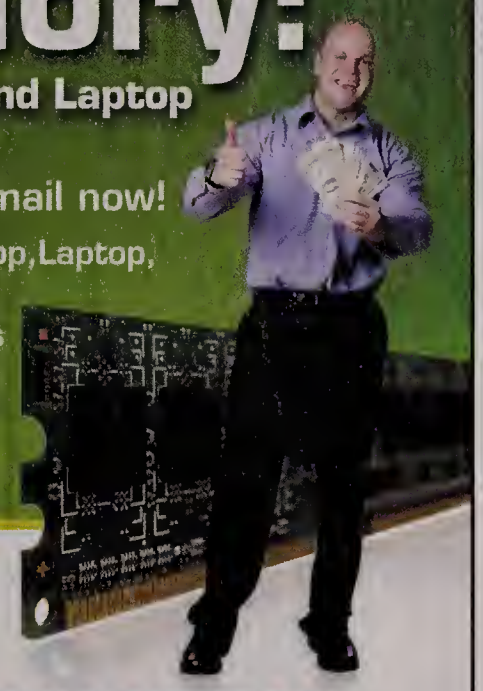
For more information contact:
Enku Gubaie
508.766.5487
egubaie@idgenterprise.com

We Buy Memory!

For PC, Server, and Laptop

Wanted, Call or Email now!

- 1,2,4,8 GB Desktop,Laptop, Server Memory
- Intel & AMD CPU's
- Cisco Switches



Call Jeff TODAY!

SMS MEMORY

The low price leader for quality memory modules since 1989

(239)-596-2254

Jeff@smsassembly.com | www.smsassembly.com

Personalized IT newsletters from Tech Dispenser.

You pick the topics. **You** pick the sources. **You** pick the frequency.

Build your own newsletter featuring your favorite technology topics — cloud computing, application development, security — over 200 timely topics, from more than 700 trusted sources.

Get started today. It's free.
www.techdispenser.com

TECH DISPENSER

Disturbingly personal newsletters

The Virtual Gramophone

Digital music makes you think of the latest hits on iPods and Pandora, but now the Library of Congress is bringing much older recordings into the digital age. Over the past two years, audio technicians have carefully converted over 10,000 recordings of musical performances made between 1901 and 1925 into MP3 files that can be streamed—free of charge—at the library's National Jukebox website (*loc.gov/jukebox/*). The recordings include those of early African-American artists, opera star Enrico Caruso, and entertainer Al Jolson. This is music that has been "largely unavailable to the public," says Jukebox Curator David Sager. The grooves of the fragile 78 rpm records had to be cleaned before technicians could use turntables and needles to transform selected tracks into high-quality digital files. There are 3,000 more records waiting to be converted, and the library is considering allowing downloads in the future, Sager says.

—Lauren Brousell

PHOTO BY ANTHONY TUENI/ISTOCKPHOTO

[TOUGH QUESTION #18]

NETWORK SECURITY | SECURE REMOTE ACCESS | WEB AND E-MAIL SECURITY | BACKUP AND RECOVERY | POLICY AND MANAGEMENT

WHO MAKES THE HIGHEST PERFORMANCE LOW LATENCY NEXT-GEN FIREWALL?

SONICWALL SECURES THE ENTERPRISE.

SonicWALL® enables IT to get back in control and more easily and efficiently stay ahead of today's constantly evolving threats and application-related issues. An advanced security platform consolidates core Next-Gen Firewall application intelligence, control and visualization, gateway protection, and inspection for SSL encrypted sessions for the enterprise with critical solutions like WAN acceleration for distributed offices. SonicWALL's low latency platform scans and secures every packet, efficiently securing the network, controlling Web 2.0 apps, and optimizing bandwidth.

Secure network optimization which minimizes complexity and latency is now within reach. Learn about our SuperMassive™ E10000 Series and the rest of our network security line-up at **sonicwall.com/optimize**

SONICWALL

DYNAMIC SECURITY FOR THE GLOBAL NETWORK™

© 2011 SonicWALL, Inc. SonicWALL and the SonicWALL logo are registered trademarks of SonicWALL, Inc.

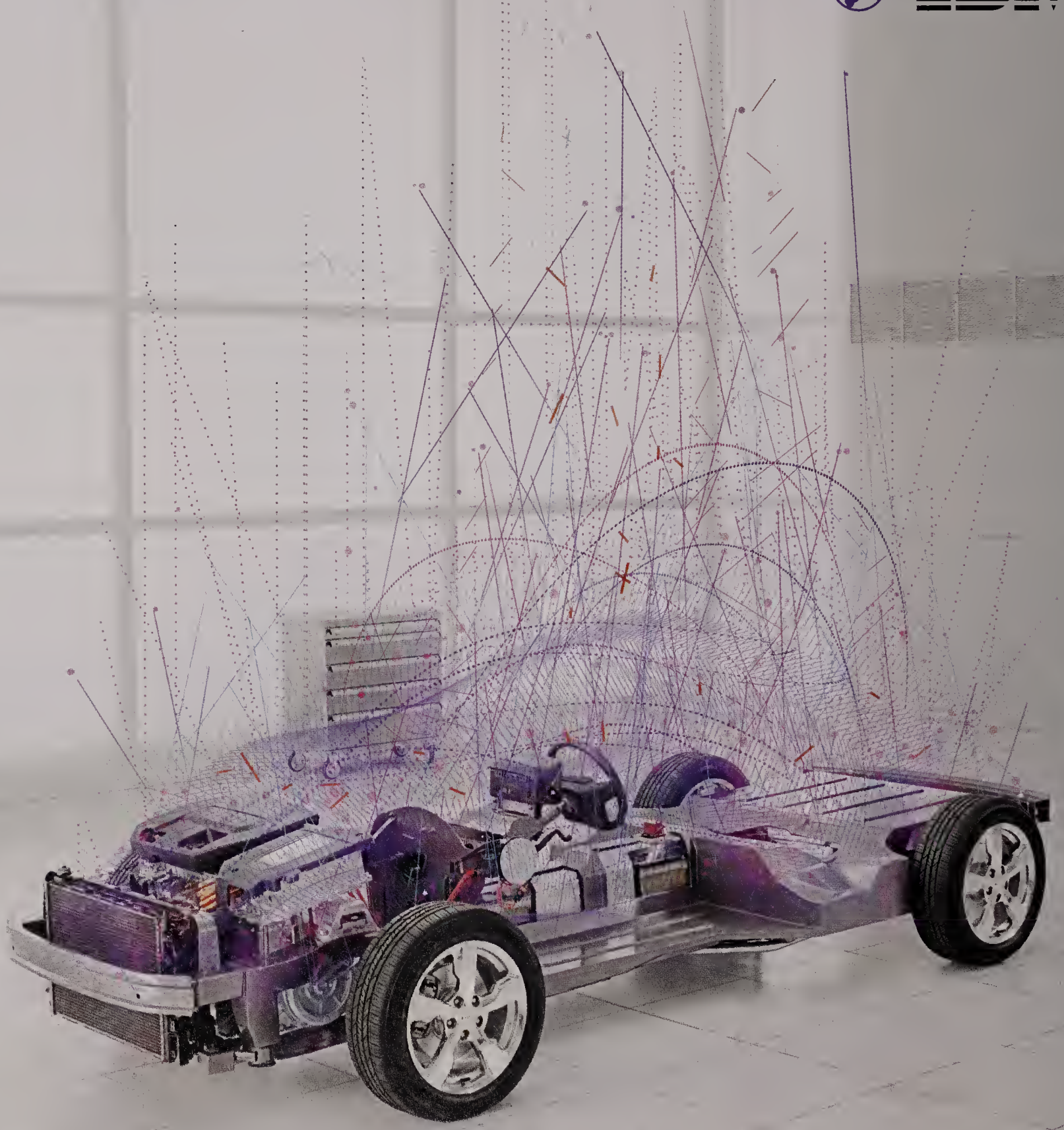
Smarter business for a Smarter Planet:

How to build a car fueled by software.

When you look at the Chevrolet Volt, are you looking at steel and plastic, or are you looking at software? The Volt, an electric car with gas-powered extended range, contains over 10 million lines of code, more software than you'd find in the avionics and navigation systems of a modern fighter jet. Chevrolet turned to IBM to help them design the control systems and software for the Volt, allowing them to deliver this revolutionary car in far less time than development typically takes. Using the Rational® platform to design the car allowed engineers around the world to collaborate in real time, which helped the Volt become the 2011 *Motor Trend* Car of the Year®. A smarter business is built on smarter software, systems and services.

Let's build a smarter planet. ibm.com/collaborate

IBM



IBM, the IBM logo, ibm.com, Rational, Smarter Planet and the planet icon are trademarks of International Business Machines Corp., registered in many jurisdictions worldwide. Other product and service names might be trademarks of IBM or other companies. A current list of IBM trademarks is available on the Web at www.ibm.com/legal/copytrade.shtml. © International Business Machines Corporation 2011.